UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,258	01/04/2006	Takeshi Iwatsu	277188US6PCT	9948

22850   7590   09/20/2007
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
HOANG, SON T

ART UNIT	PAPER NUMBER
2169	

NOTIFICATION DATE	DELIVERY MODE
09/20/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/563,258	IWATSU ET AL.
	Examiner	Art Unit	
	Son T. Hoang	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 January 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 January 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☒ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>01 May 2006</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

The instant application having Application No. 10/563,258 has a total of 23 claims pending in the application; there are 3 independent claims and 20 dependent claims, all of which are ready for examination by the Examiner.

Oath/Declaration

1.   The Applicant's oath/declaration has been reviewed by the Examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

Information Disclosure Statement

2.   As required by **M.P.E.P. 609(C)**, the Applicant's submission of the Information Disclosure Statement dated May 01, 2006 is acknowledged by the Examiner. Only the cited references have been considered in the examination of the claims now pending but not the related applications since they were all filed after the earliest filing date of this instant application. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the Examiner is attached to the instant office action.

Priority

3.   The Applicant's claim for foreign priority of Japanese Application No. 2003-332566 (filed on September 24, 2003) is confirmed. The Examiner takes the foreign filing date of September 24, 2003 into consideration.

Abstract

4.   The abstract of the disclosure is accepted for examination purposes.

Drawings

5.   The drawings were received on April 01, 2006. These drawings are

acceptable for the examination purposes.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and
> process of making and using it, in such full, clear, concise, and exact terms as to enable any
> person skilled in the art to which it pertains, or with which it is most nearly connected, to make
> and use the same and shall set forth the best mode contemplated by the inventor of carrying
> out his invention.

7.   **Claims 4-6, 13-15, 22** are rejected under 35 U.S.C. 112, first paragraph,

because these claims contain the word *"unconditionally"* that are not supported in

the disclosure.

8.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

9.   **Claims 4-6, 13-15, 22** are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention.

        Regarding **claims 4-6, 13-15, 22**; the word *"unconditionally"* is cited

on line 2 without definition(s) or explanation(s) or efficient support(s) in the

disclosure.

Claim Rejections - 35 USC § 101

10.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or
> composition of matter, or any new and useful improvement thereof, may obtain a patent
> therefor, subject to the conditions and requirements of this title.

11.   Claims 19-23 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matters.

Regarding **claim 19**, "*a data storage control program for causing an information processing apparatus*" is being recited. However, "*a data storage control program*" can easily be interpreted by a person with ordinary skills in the art as software per se and functional descriptive material consisting of data structures and computer programs, which impart functionality when employed as a computer component. As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

Regarding **claims 20-23**, they fail to resolve the deficiencies of **claim 19** and only further limit the scope of **claims 19**. Therefore, **claims 20-23** are also rejected under 35 U.S.C. 101.

The claims above lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se.*

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When <u>functional</u>

descriptive material is recorded on some computer-readable medium, it

becomes structurally and functionally interrelated to the medium and will

be statutory in most cases since use of technology permits the function of

the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d

1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract

ideas, stored on a computer-readable medium, in a computer, or on an

electromagnetic carrier signal, does not make it statutory. See Diehr, 450

U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in

Benson were unpatentable as abstract ideas because "[t]he sole practical

application of the algorithm was in connection with the programming of a

general purpose computer.")

Claim Rejections - 35 USC § 102

12.   The following is a quotation of the appropriate Paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this Section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

13.   **Claims 1-6; 10-15; 19-22;** are rejected under 35 U.S.C. 102(a) as being

anticipated by Yuji (Pub. No. JP 2003-173278, published on June 20, 2003).

Regarding **claim 1**, Yuji clearly shows and discloses a data storage

control apparatus ([0018]-[0022]), comprising:

data attribution detection means for detecting attribution of

storing-target data (*The data is passed to the filer section. Out of*

the passed data, the filer section identifies expiration date

information, significance information and classification information,

[0022]);

determination means for determining whether or not the

storage of said data is to be performed based on the attribution of

said data detected by said data attribution detection means (*When*

having passed over the expiration date, (Y) cancels received data

(it does not record) and is completed, [0022]);

data deletion means for deleting data having higher deletion-

target priority than others from among a plurality of stored data, if

said determination means determines that the storage of said data

is to be performed and a storage medium for storing said data runs

out of space, said deletion-target priority being determined based

on attribution of said plurality of stored data (*The record control*

section records the information received from the filter section on a

recording device. Here, when the capacity of a recording device is

full, the data considered to be the most unnecessary are eliminated

in order, judging from significance, classification, information, an

expiration date ... Moreover, the record control section eliminates

automatically the information which has passed over the expiration

date in the recorded information, [0019]); and

data storage means for storing said storing-target data in

said storage medium after said data deletion means deletes data

having higher said deletion-target priority (*When the capacity of a*

recording device is full, the data considered to be the most

unnecessary are eliminated in order, judging from significance,

classification information, an expiration date, etc., and the

information received newly is recorded, [0019]).

Regarding **claim 2**, Yuji further discloses a data storage control

apparatus, wherein said data attribution detection means detects

attribution of said data based on applications which request the storage of

said data (*A sending set transmits the data of a gestalt which the inverter*

changed and which can be distributed with a broadcasting mold, [0018]).

Regarding **claim 3**, Yuji further discloses a data storage control

apparatus, wherein said data attribution detection means extracts data

attribution information which said data contains to detect attribution of said

data (*The data is passed to the filer section. Out of the passed data, the*

filer section identifies expiration date information, significance information

and classification information, [0022]).

Regarding **claims 4** and **6**, Yuji further discloses a data storage

control apparatus, wherein the determination means unconditionally

determines the storage of said data is to be performed, if attribution of said

data shows that said data is information relating to broadcast contents or

said data is broadcast content data (*When it is judged that earthquake*

information, a heavy rain warning, etc. are important for a user as for the

classification information which shows the classification of the contents

whose information the and it will change into the data of a gestalt which

can be distributed, [0018]. *Since the information which can judge when*

informational important point or needlessness data are received, hence,

does not record unnecessary information, [0029]).

Regarding **claim 5**, Yuji further discloses a data storage control

apparatus, wherein the determination means unconditionally determines

the storage of said data is to be performed, if attribution of said data

shows that said data is now-on-air information including title information of

broadcast contents (*Classification information of the important information,*

i.e., earthquake information, a heavy rain warning etc. may be added with

the category information which subdivided an informational classification

further, [0018]. *It is inherent that classification and/or category information*

contains title of the important news / information).

Regarding **claim 10**, Yuji clearly shows and discloses a data

storage control method ([0018]-[0022]), comprising the steps of:

a data attribution detection step of detecting attribution of

storing-target data (*The data is passed to the filer section. Out of*

the passed data, the filer section identifies expiration date

information, significance information and classification information,

[0022]);

a determination step of determining whether or not the

storage of said data is to be performed based on the attribution of

said data detected by said data attribution detection step (*When*

having passed over the expiration date, (Y) cancels received data

(it does not record) and is completed, [0022]);

a data deletion step of deleting data having higher deletion-

target priority than others from among a plurality of stored data, if

said determination step determines that the storage of said data is

to be performed and a storage medium for storing said data runs

out of space, said deletion-target priority being determined based

on attribution of said plurality of stored data (*The record control*

section records the information received from the filter section on a

recording device. Here, when the capacity of a recording device is

full, the data considered to be the most unnecessary are eliminated

in order, judging from significance, classification, information, an

expiration date ... Moreover, the record control section eliminates

automatically the information which has passed over the expiration

date in the recorded information, [0019]); and

a data storage step of storing said storing-target data in said

storage medium after said data deletion step deletes data having

higher said deletion-target priority (*When the capacity of a recording device is full, the data considered to be the most unnecessary are eliminated in order, judging from significance, classification information, an expiration date, etc., and the information received newly is recorded*, [0019]).

Regarding **claim 11**, Yuji further discloses a data storage control method, wherein attribution of said data is detected based on applications which request the storage of said data, at said data attribution detection step (*A sending set transmits the data of a gestalt which the inverter changed and which can be distributed with a broadcasting mold*, [0018]).

Regarding **claim 12**, Yuji further discloses a data storage control method, wherein attribution of said data is detected by extracting data attribution information which said data contains, at said data attribution detection step (*The data is passed to the filer section. Out of the passed data, the filer section identifies expiration date information, significance information and classification information*, [0022]).

Regarding **claims 13** and **15**, Yuji further discloses a data storage control method, wherein it is unconditionally determined that the storage of said data is to be performed, if attribution of said data shows that said data is information relating to broadcast contents or said data is broadcast content data, at said determination step (*When it is judged that earthquake information, a heavy rain warning, etc. are important for a user*

as for the classification information which shows the classification of the

contents whose information the and it will change into the data of a gestalt

which can be distributed, [0018]. *Since the information which can judge*

when informational important point or needlessness data are received,

hence, does not record unnecessary information, [0029]).

Regarding **claim 14**, Yuji further discloses a data storage control

method, wherein it is unconditionally determined that the storage of said

data is to be performed, if attribution of said data shows that said data is

now-on-air information including title information of broadcast contents, at

said determination step (*Classification information of the important*

information, i.e., earthquake information, a heavy rain warning etc. may be

added with the category information which subdivided an informational

classification further, [0018]. *It is inherent that classification and/or*

category information contains title of the important news / information).

Regarding **claim 19**, Yuji clearly shows and discloses a data

storage control program ([0018]-[0022]), for causing an information

processing apparatus to execute the steps of:

a data attribution detection step of detecting attribution of

storing-target data (*The data is passed to the filer section. Out of*

the passed data, the filer section identifies expiration date

information, significance information and classification information,

[0022]);

a determination step of determining whether or not the storage of said data is to be performed based on the attribution of said data detected by said data attribution detection step (*When having passed over the expiration date, (Y) cancels received data (it does not record) and is completed*, [0022]);

a data deletion step of deleting data having higher deletion-target priority than others from among a plurality of stored data, if said determination step determines that the storage of said data is to be performed and a storage medium for storing said data runs out of space, said deletion-target priority being determined based on attribution of said plurality of stored data (*The record control section records the information received from the filter section on a recording device. Here, when the capacity of a recording device is full, the data considered to be the most unnecessary are eliminated in order, judging from significance, classification, information, an expiration date ... Moreover, the record control section eliminates automatically the information which has passed over the expiration date in the recorded information*, [0019]); and

a data storage step of storing said storing-target data in said storage medium after said data deletion step deletes data having higher said deletion-target priority (*When the capacity of a recording device is full, the data considered to be the most*

unnecessary are eliminated in order, judging from significance,

classification information, an expiration date, etc., and the

information received newly is recorded, [0019]).

Regarding **claim 20**, Yuji further discloses a data storage control

program, wherein attribution of said data is detected based on applications

which request the storage of said data, at said data attribution detection

step (*A sending set transmits the data of a gestalt which the inverter*

changed and which can be distributed with a broadcasting mold, [0018]).

Regarding **claim 21**, Yuji further discloses a data storage control

program, wherein attribution of said data is detected by extracting data

attribution information which said data contains, at said data attribution

detection step (*The data is passed to the filer section. Out of the passed*

data, the filer section identifies expiration date information, significance

information and classification information, [0022]).

Regarding **claim 22**, Yuji further discloses a data storage control

program, wherein it is unconditionally determined that the storage of said

data is to be performed, if attribution of said data shows that said data is

related information relating to broadcast contents, at said determination

step (*When it is judged that earthquake information, a heavy rain warning,*

etc. are important for a user as for the classification information which

shows the classification of the contents whose information the and it will

change into the data of a gestalt which can be distributed, [0018]. *Since*

the information which can judge when informational important point or

needlessness data are received, hence, does not record unnecessary

information, [0029]).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

15.   This application currently names joint inventors. In considering

patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

the subject matter of the various claims was commonly owned at the time any

inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

16.   **Claims 7-9; 16-18; 23;** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yuji (Pub. No. JP 2003-173278, published on June 20, 2003)

in view of Wright, JR. et al. (Pub. No. US 2004/0122873, filed on December 20,

2002; hereinafter Wright JR.).

Regarding **claims 7-8**, Yuji does not explicitly disclose if attribution

of said data shows that said data is information relating to storage media /

compact discs, said data deletion means determines that said deletion-

target priority of said data is high to delete said data.

Wright, JR. discloses a file can have an attribute indicating the file

is deletable associated with it. The attribute is indicative that the file is

deletable to software, such as operating system software; or file system

software or to a user, such as a system administrator, that the file is

deletable. Wright, JR. further discloses that a file can include any

collection of data that is treated by a system accessing the data as a unit

capable of being input and output. Therefore, a file can include any

directory entry, including a single file name, a group of file names, a sub-

directory, a directory or other set or subset of data units ([0025]).

It would have been obvious to a person with ordinary skills in the art

at the time of the invention to incorporate the teachings of Wright, JR. with

the teachings of Yuji for the purpose of facilitating management of free file

space ([0006] of Wright, JR.).

Regarding **claim 9**, Wright, JR. further discloses if attribution of

said data shows that said data is content data copied from storage media,

said data deletion means determines that said deletion-target priority of

said data is high to delete said data (*A file can include any collection of*

data that is treated by a system accessing the data as a unit capable of

being input and output as well as associating an attribute to indicate that

the file is deletable, [0025]).

Regarding **claims 16-17, 23**; Yuji does not explicitly disclose if

attribution of said data shows that said data is information

relating/corresponding to storage media/compact discs, it is determined

that said deletion-target priority of said data is high to delete said data, at

said data deletion step.

Wright, JR. discloses a file can have an attribute indicating the file

is deletable associated with it. The attribute is indicative that the file is

deletable to software, such as operating system software; or file system

software or to a user, such as a system administrator, that the file is

deletable. Wright, JR. further discloses that a file can include any

collection of data that is treated by a system accessing the data as a unit

capable of being input and output. Therefore, a file can include any

directory entry, including a single file name, a group of file names, a sub-

directory, a directory or other set or subset of data units ([0025]).

It would have been obvious to a person with ordinary skills in the art

at the time of the invention to incorporate the teachings of Wright, JR. with

the teachings of Yuji for the purpose of facilitating management of free file

space ([0006] of Wright, JR.).

Regarding **claim 18**, Wright, JR. further discloses if attribution of

said data shows that said data is content data copied from storage media,

it is determined that said deletion-target priority of said data is high to delete said data, at said data deletion step (*A file can include any collection of data that is treated by a system accessing the data as a unit capable of being input and output as well as associating an attribute to indicate that the file is deletable*, [0025]).

Conclusion

17.   These following prior arts made of record and not relied upon are

considered pertinent to Applicant's disclosure:

      Furuya (Pat. No. US 6,628,936) teaches communication terminal

device.

      Borland (Pat. No. US 6,320,943) teaches electronic directory

system and method.

      Sato et al. (Pat. No. US 7,103,369) teaches system and method for

obtaining content relating to a predicted location of a terminal apparatus.

The Examiner requests, in response to this Office action, support(s) must

be shown for language added to any original claims on amendment and any new

claims. That is, indicate support for newly added claim language by specifically

pointing to page(s) and line no(s) in the specification and/or drawing figure(s).

This will assist the Examiner in prosecuting the application.

When responding to this office action, Applicant is advised to clearly point

out the patentable novelty which he or she thinks the claims present, in view of

the state of the art disclosed by the references cited or the objections made. He

or she must also show how the amendments avoid such references or objections

See 37 CFR 1.111(c).

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Son T. Hoang whose telephone number is (571) 270-1752. The Examiner can normally be reached on Monday - Friday (7:30 AM – 5:00 PM).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mohammad Ali can be reached on (571) 272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.H./

Son T. Hoang

Patent Examiner

August 31, 2007

MOHAMMAD ALI
PRIMARY EXAMINER